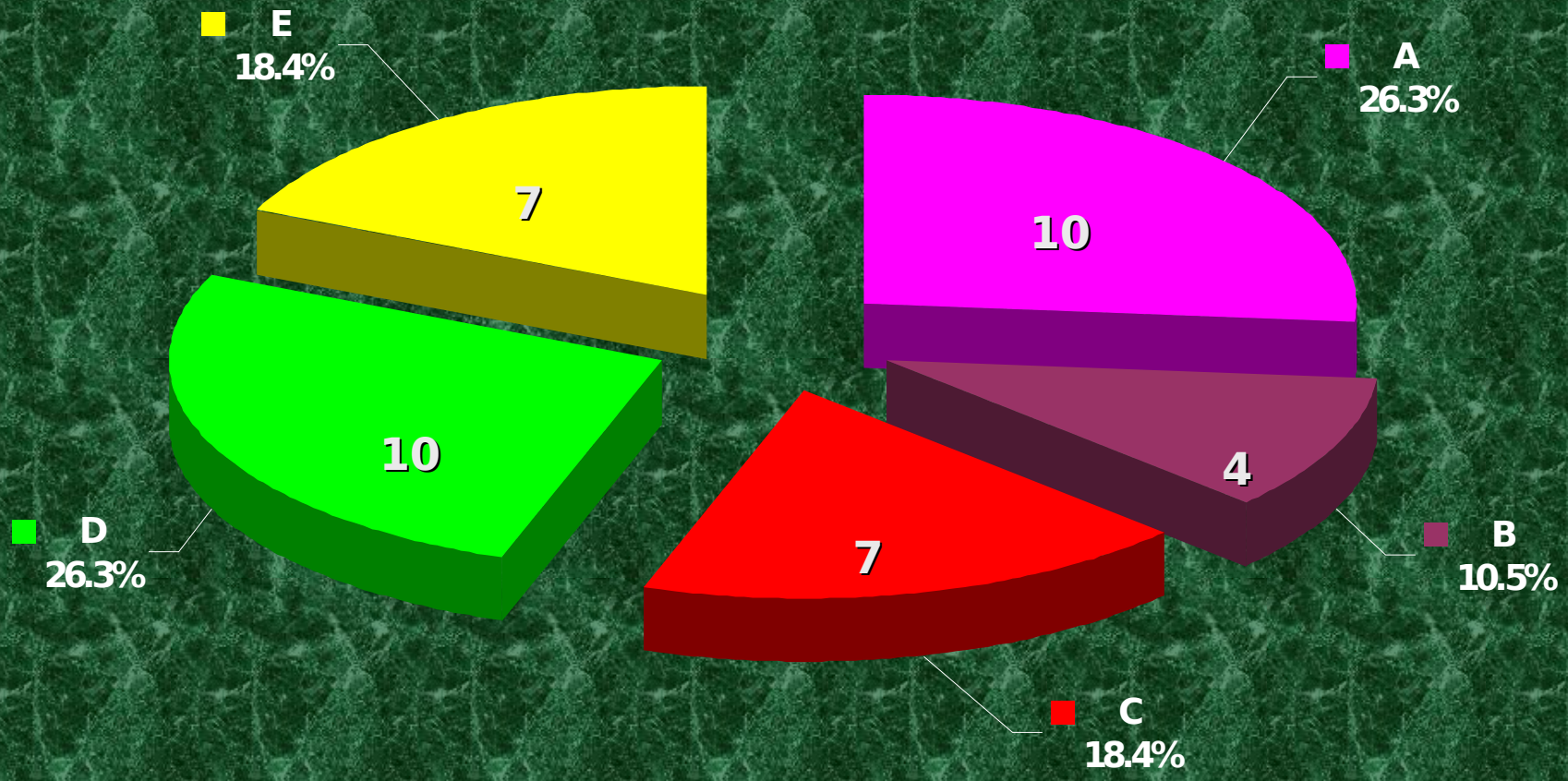
CJTF-7 Aviation Safety

Accident Classification

CLASS	NUMBER	%
A	10	26.3%
B	4	10.5%
C	7	18.4%
D	10	26.3%
E	7	18.4%
	38	100.0%

OIF Aviation Accidents (CLASSIFICATION)

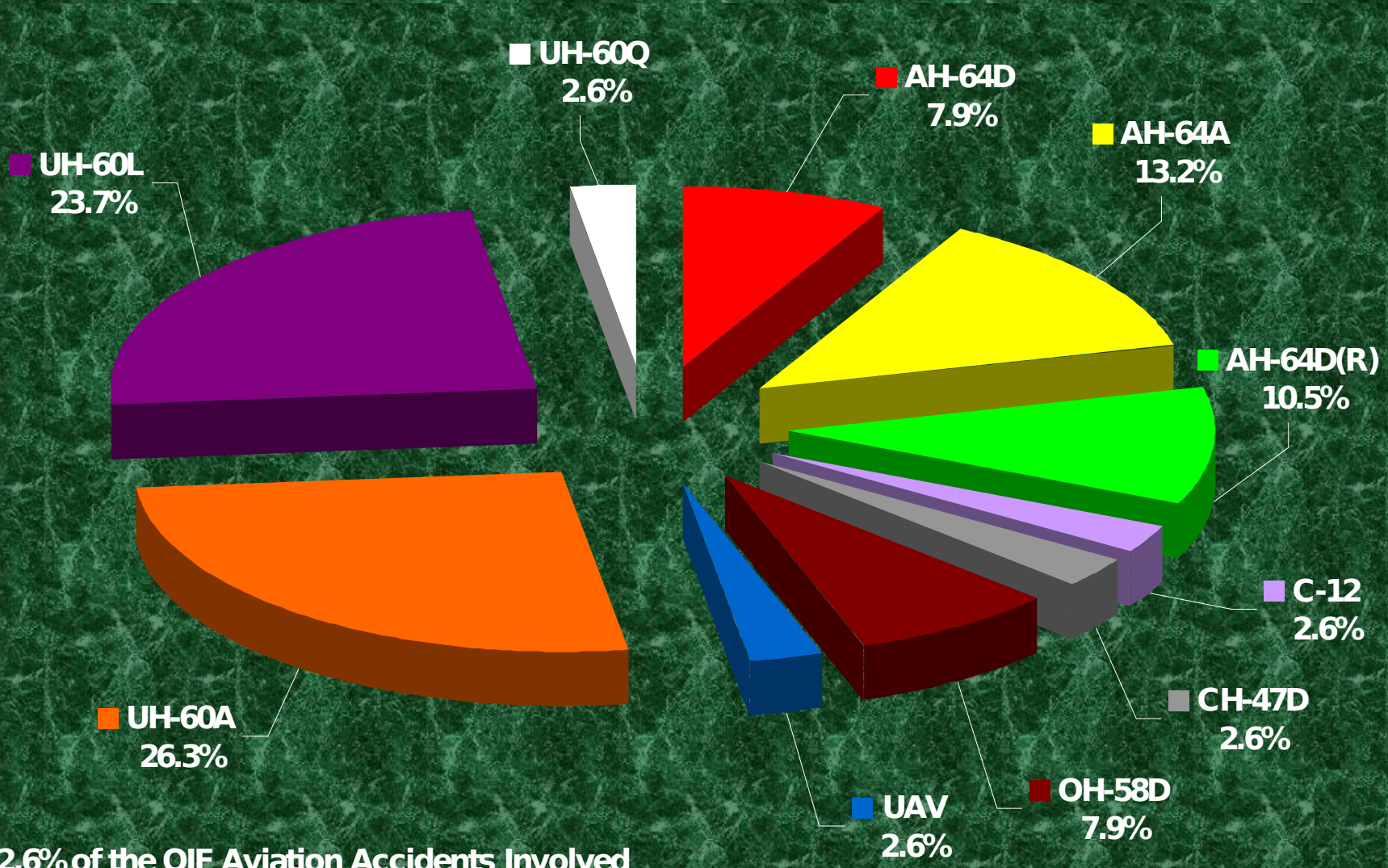


26.3% Of The OEF/OIF Aviation Accidents That Have Occurred Were Class A Events Resulting In A Total Of Seven (7) Fatalities.

Accident MTDS

MTDS	ACCIDENTS	%
C-12	1	2.6%
CH-47D	1	2.6%
UAV	1	2.6%
UH-60Q	1	2.6%
AH-64D	3	7.9%
OH-58D	3	7.9%
AH-64D(R)	4	10.5%
AH-64A	5	13.2%
UH-60L	9	23.7%
UH-60A	10	26.3%
	38	100.0%

OIF Aviation Accidents (MTDS)

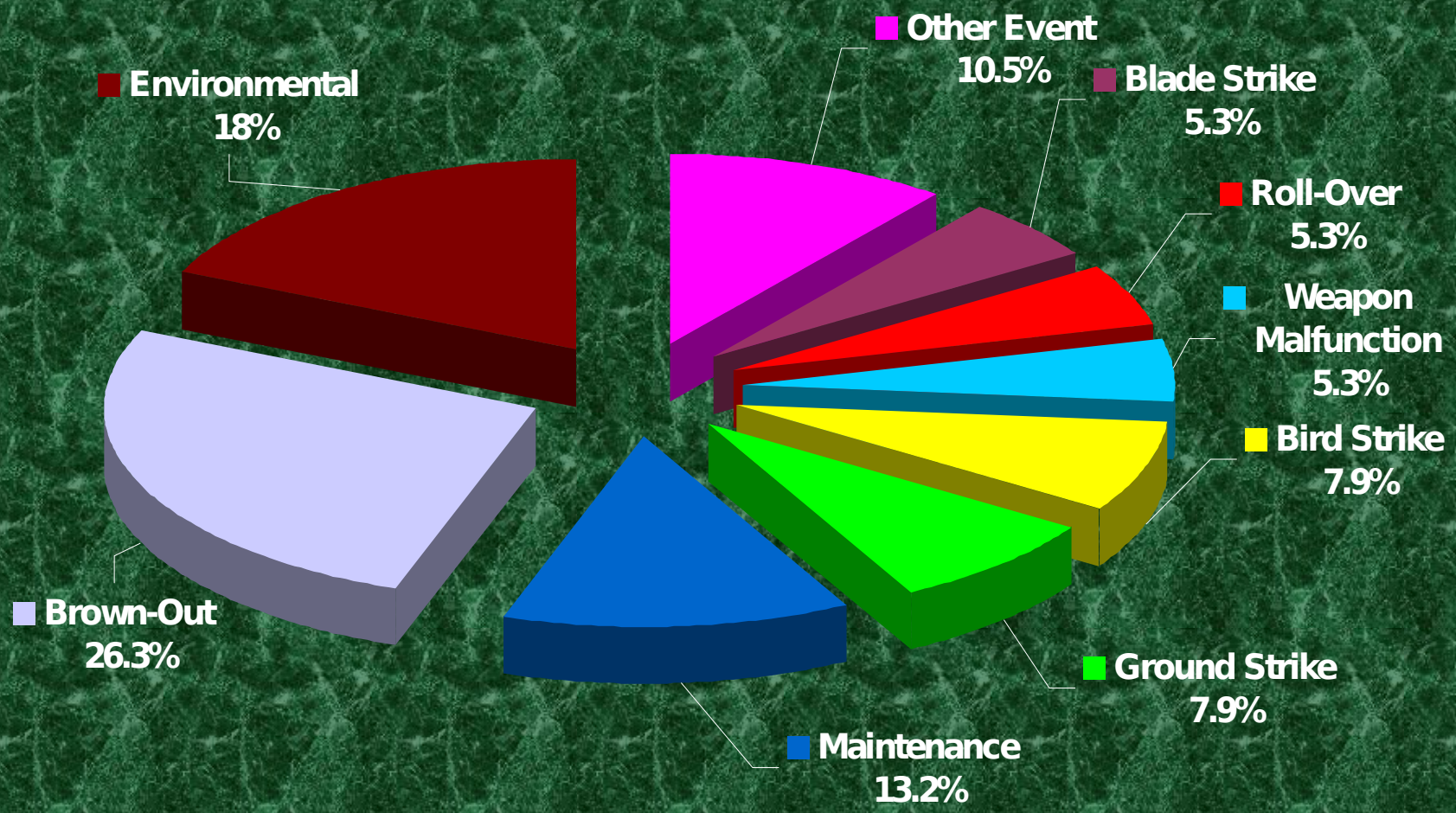


52.6% of the OIF Aviation Accidents Involved UH-60 Aircraft. 31.6% Were AH-64 Aircraft.

OIF Aviation Accidents (Primary Event)

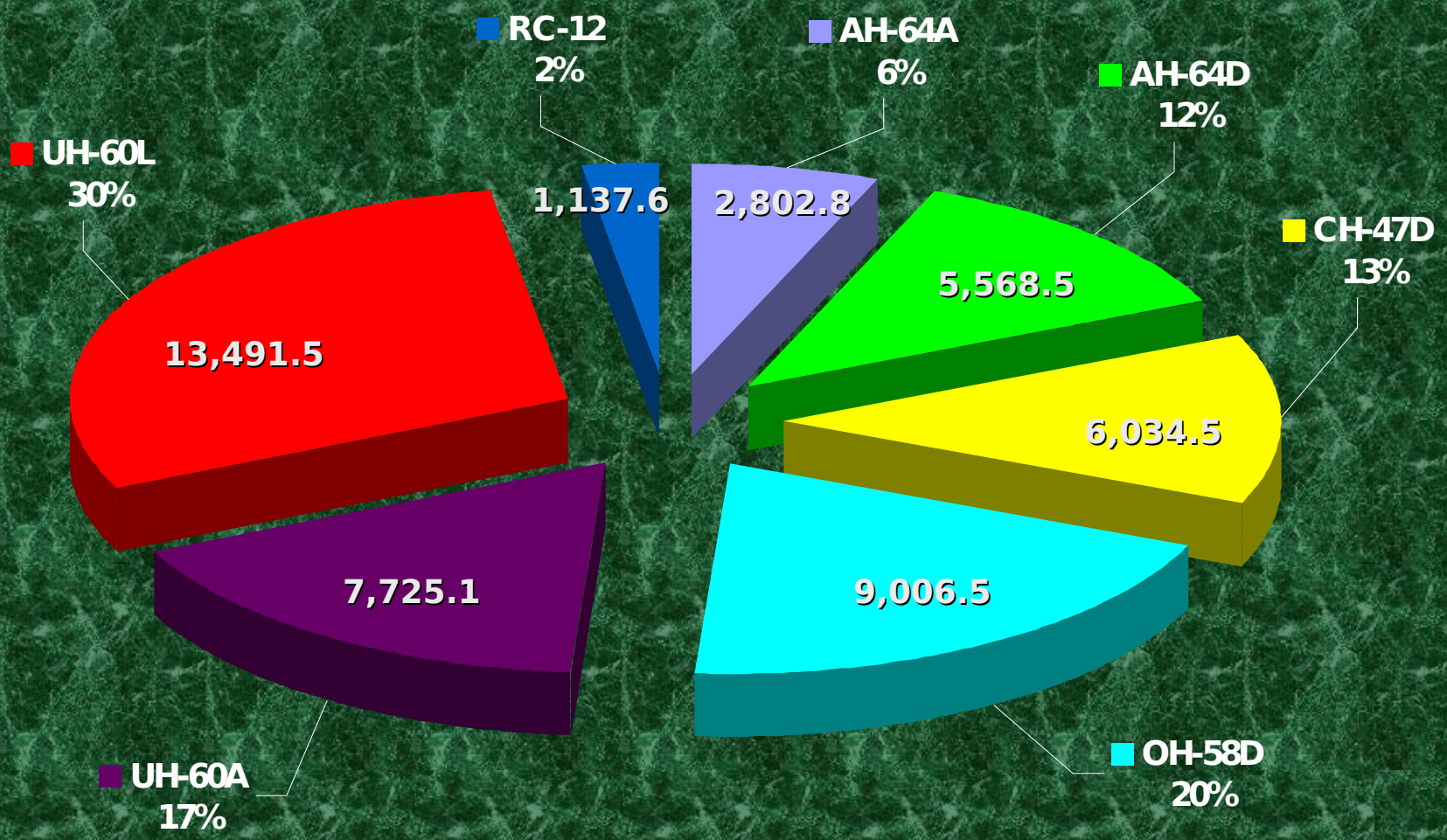
PRIMARY EVENT	ACCIDENTS	%
Blown Tire	1	2.6%
Ground Handling	1	2.6%
Lost Signal	1	2.6%
Wire Strike	1	2.6%
Blade Strike	2	5.3%
Roll-Over	2	5.3%
Weapon Malfunction	2	5.3%
Bird Strike	3	7.9%
Ground Strike	3	7.9%
Maintenance	5	13.2%
Environmental	7	18.4%
Brown-Out	10	26.3%
		100.0%

OIF Aviation Accidents (Primary Event)



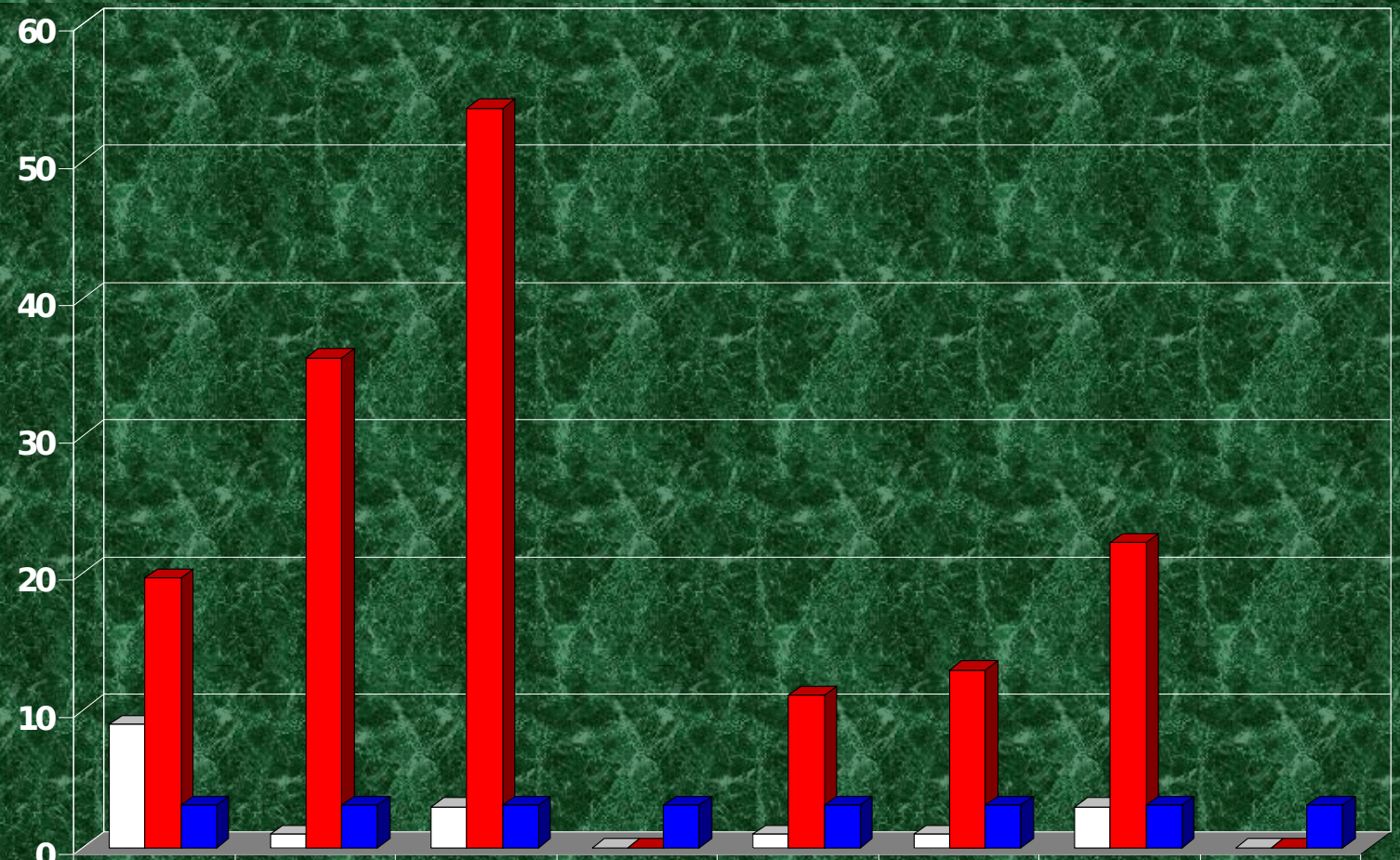
26.3% or Ten (10) OEF/OIF Aviation Accidents Involved Brown-Outs. Five (6) Class A, Two (2) Class B, One (1) Class C, and One (1) Class D.

OIF Aviation Flight Hours By Aircraft



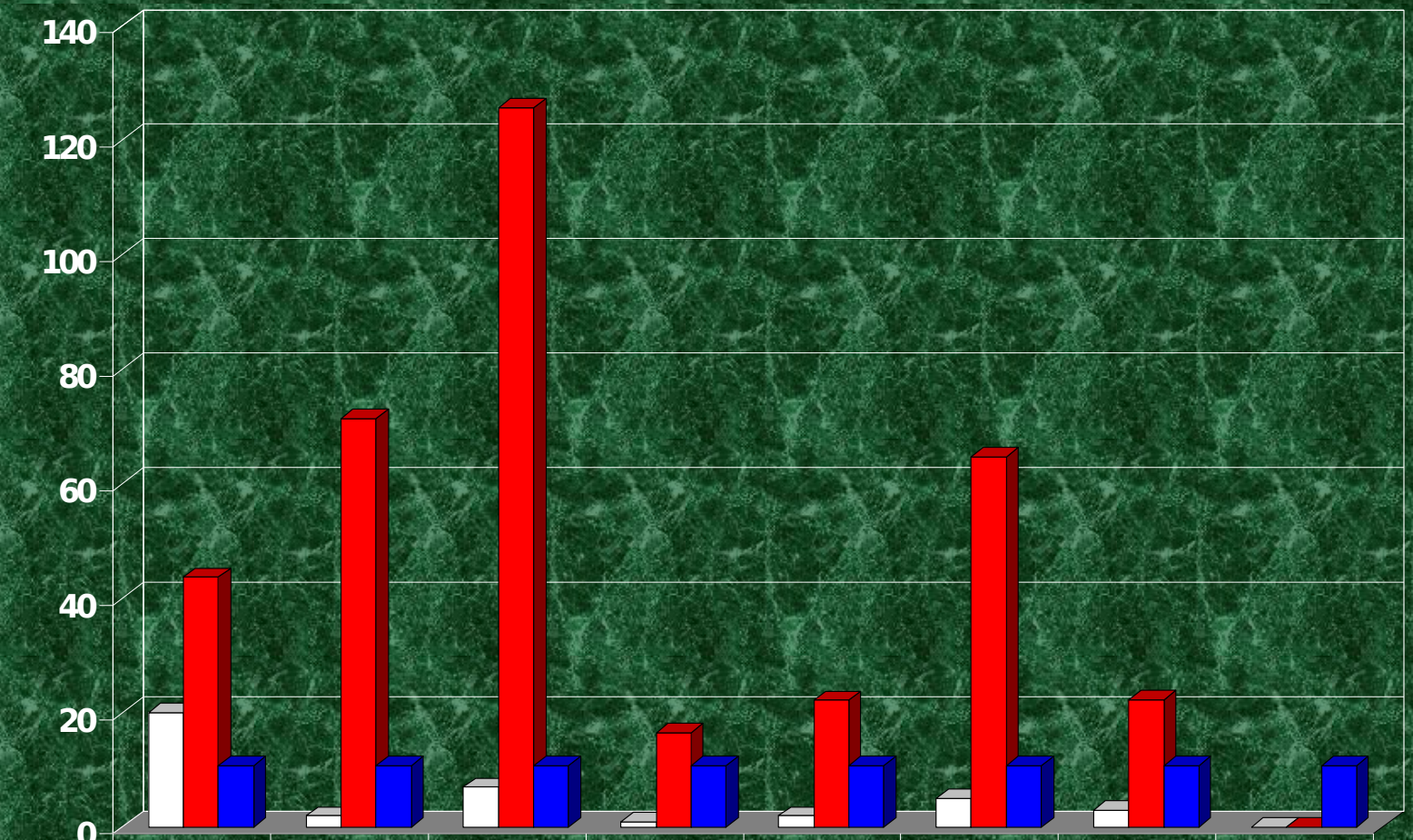
Data As Of 15 May 03

OIF Class A Accident Rate By Aircraft



	OIF	AH-64A	AH-64D	CH-47D	OH-58D	UH-60A	UH-60L	RC-12
OIF Class A	9	1	3	0	1	1	3	0
OIF A Rate	19.67	35.68	53.87	0.00	11.10	12.94	22.24	0.00
DA A Rate	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13

OIF Class A-C Accident Rate By Aircraft



	OIF	AH-64A	AH-64D	CH-47D	OH-58D	UH-60A	UH-60L	RC-12
OIF Class A-C	20	2	7	1	2	5	3	0
OIF A-C Rate	43.70	71.36	125.71	16.57	22.21	64.72	22.24	0.00
DA A-C Rate	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80

Aviation Safety Issues

- ISSUE: Environmental Training

- DISCUSSION: Aviation units arrived in country with aircrews at a variety of training levels. At the conclusion of Reception Staging Onward Movement, and Integration (RSOI), the average desert experience hour level per aircrew was considered by some to be inadequate. Night desert experience is a critically important factor and most aviation commanders have since concluded that our worst enemy is the environment.

- RECOMMENDATION: Educate our leaders on the proper conduct of aviation RSOI. Extend the Timed Phased Force Deployment Data (TPFDD) in order to enable aviation units to RSOI over a greater period of time. Ensure RSOI is resourced with enough training areas to provide realistic training opportunities.

Aviation Safety Issues

- ISSUE: Aircraft Performance Planning Card (PPC)
- DISCUSSION: Modern aircraft experience performance limitations based on modifications and additional equipment. Compromises must be made between fuel, ammo, and cargo based upon METT-TC. Additionally, aviation units require adequate real estate to occupy and conduct aviation operations. Small Tactical Assembly Areas (TAAs) with limited hardstands and only one landing direction have had severe adverse impacts on aviation operations.
- RECOMMENDATION: Larger and better prepared TAAs are required, especially in the desert environment. Planners, leaders, and aircrews must consider environmental factors and hazards when planning and executing missions, and selecting TAAs.

Aviation Safety Issues

- ISSUE: Sand/Dust Takeoffs and Landings

- DISCUSSION: The sand and dust in central Iraq "moon dust" poses a significant hazard to aviation operations. Helicopters are landing and taking-off under IFR conditions as a result of blowing sand and dust. Brown-outs and poor environmental conditions have contributed to a significant number of accidents and damage to aircraft. Engineers attempted to mitigate the hazard at FARPs by soaking 100' x 100' landing surfaces with JP-8 and then layering them with 3" of gravel. Mobi-Matting has also been used with some success.

- RECOMMENDATION: Develop and implement countermeasures to mitigate the hazards associated with blowing sand and dust conditions in the desert environment. Likewise, considerable attention must be given to future landing site selection and preparation (TAAs & FARPS) in light of the significant losses suffered during OIF as a result of this hazard.

Aviation Safety Issues

- ISSUE: Night Vision Devices

- DISCUSSION: UH-60 flights conducted utilizing NVGs in the desert environment under extremely low light conditions are extremely challenging. Cockpit workload increases and observable limitations in both communications (underutilization of HF radio capabilities) and objective area search capabilities are experienced. Integration with AH-64s using FLIR in the lead for hazard identification and in trail for weapons coverage enhanced mission performance capabilities. Pre-combat training with AH-64s while in Kuwait helped prepare UH-60 aircrews to overcome their visual limitations and helped reduced risk during combat.

- Recommendation: In the absence of FLIR or other cockpit enhancements, continue to integrate and train with AH-64 aircraft taking advantage of their FLIR capabilities during low illumination, desert flights.

Residual Aviation Safety Issues

- **Procedures**
  - Aviation Standardization & Safety Conference
  - APG Staffing & Implementation
  - Communications, Corridors, WX, etc…
- **Hazards**
  - Environment (Wind, Sand, Dust) Brown-Outs
  - Obstructions (Lighting & Wires)
  - Bird Strikes
  - Maintenance
- **Airfields & FARPS**
  - Parking – HESCO/Berms
  - Weapons/Ammunition – Loading/Unloading/Storage

Conclusion & Challenges

- **Reporting & Analysis**
  - Accurate Reporting & Data Collection (Challenge)
  - Trend Analysis (Accident Causal Factors)
  - Target Prevention Measures (Proactive & Preventative)
- **Human Error (Leadership & Individual Failure)**
  - Identify Trends & Systemic Problems (Challenge)
  - Develop Reduction Methods
  - Target Risk Takers – Intervention
  - Ownership (Accountability & Direct Oversight)
  - Command Emphasis & Support
- **Lessons Learned**
  - Collect, Evaluate, and Apply Lessons Learned

UH-60 FARP LANDING IN BLOWING SAND - DUST

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UH-60 CLASS A ACCIDENT 25 FEBRUARY 2003

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Questions & Comments?